Background

Solid Waste Facilities Master Plan

Seattle Public Utilities

Authorized by city resolution, the **purpose** of the Solid Waste Facilities Master Planning process is to develop recommendations for facility improvements to the solid waste management system that will meet the city's needs for the next 30 years. These facility improvement needs were identified in the Solid Waste Management Plan. Seattle Public Utilities will host meetings throughout the process to receive public input on the plan development.

For **additional information** about this project, visit the SPU website at www.seattle.gov/util or contact Henry Friedman at (206) 733-9147 or swfmp.spu@seattle.gov.

Key goals of the Solid Waste Facilities Master Plan:

- Forecast the city's long-term solid waste needs;
- Use ratepayer money wisely and efficiently;
- Reduce environmental impacts and costs;
- Reduce impacts from noise, traffic, dust, odor, and air and water pollution on communities near the recycling & disposal stations;
- Provide a safe and healthy environment for workers and customers;
- Improve reuse and recycling opportunities for recycling & disposal station customers;
- Increase solid waste system efficiency; and
- Incorporate citizen input.

Schedule

FEBRUARY 2003	SPRING 2003	APRIL 2003	SUMMER 2003	FALL 2003	2004
Public Forums	**Development of Options**	**Public Forums**	**Selection of Alternatives for Draft Solid Waste Facilities Master Plan**	**Environmental Review**	**Final Solid Waste Facilities Master Plan**

Background

Seattle's solid waste management system consists of public- and privately-owned **facilities,** including two city-owned recycling & disposal stations:

- North Recycling & Disposal Station (NRDS) in Wallingford;
- South Recycling & Disposal Station (SRDS) in South Park.

The trash received at the **city recycling & disposal stations** is consolidated into intermodal containers and delivered to the railhead for transport by train to a privately-owned landfill in north central Oregon. The yard waste is trucked to a compost facility, and recyclables (appliances, scrap metal, wood waste, glass, etc.) are trucked to recycling facilities. The location of the solid waste facilities and railyard within the City of Seattle are shown in the figure to the right.

Who Collects What?

City-Contracted Trucks
collect **residential & commercial waste, residential recycling & yard waste and construction, demolition & landclearing waste.**

Private Haulers
collect **business recycling** and **construction, demolition & landclearing waste**.

Self-Haul customers (individuals and small businesses) haul their own **waste, recyclables,** and **yard waste** not collected at the curb.

Where Does it Go and What Happens to It?

Most of the municipal waste, recycling, construction, demolition & landclearing waste, and yard waste, collected above, is hauled to the city recycling & disposal stations or private transfer stations. The graphic below illustrates where the waste goes from there.

WASTE: Residential & Self-haul → → → **Intermodal Facility** → → **Oregon Landfill**

RECYCLABLES: Self-haul → → → **Recycling Facilities** → **Recycled Products**

YARD WASTE: Residential & Self-haul → → → **Compost Facility** → **Compost Market**

WASTE: Residential & Commercial → → → **Intermodal Facility** → → **Oregon Landfill**

RECYCLING: Residential & Business → → **Material Recovery Facility** → **Reuse or Remanufacturing Facilities** → **Recycled Products**

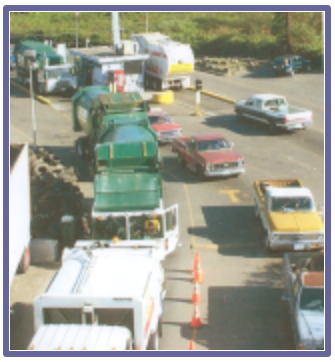
NON-RECYCLABLE CONSTRUCTION & DEMOLITION WASTE → → → **Intermodal Facility** → → **Landfills**

Challenges

Built in the 1960s, the city's recycling & disposal stations were designed to consolidate solid waste into transfer trailers for short-haul to a local landfill. When local landfills closed many years ago, each recycling & disposal station was retrofitted with a compactor to load the waste into intermodal containers. These containers are short-haul trucked to a railyard south of downtown for transfer onto a train for transport to a landfill in north central Oregon. While the remodel has worked reasonably well within the current station configurations, these facilities were not designed for the recycling and reuse opportunities we would like to provide. Existing problems with the recycling & disposal stations as they are currently designed include:

Recycling & Disposal Station Issues

- Outdated design creates long lines and slow traffic.
- Original "garbage only" design makes recycling difficult.
- Design requires staff to "handle" the garbage a lot, which is inefficient and not cost-effective.
- Safety hazards exist, such as a long drop to the disposal pit, congested traffic, noise and dust.
- Constant repairs are needed to maintain facilities (frequent floor resurfacing, compactor repair and electrical repairs).
- Significant upgrades are needed to meet current standards (seismic retrofit, stormdrain improvements).
- Employee facilities are old and inadequate (scalehouse, offices and restrooms).



Existing Railhead (Intermodal Facility) Issues

- Lacks space for on-site compaction station that would allow routing of some residential and commercial waste collection trucks directly to railhead.
- Lacks space for future expansion that may be necessary to handle increasing volumes of waste and other commodities in the long-term future.
- Limited to one rail line, which limits disposal options to only those landfills accessible by Union Pacific.

Options for Facilities Changes

Seattle Public Utilities is considering the following conceptual changes to the solid waste facilities. We are seeking public input as we develop a set of options.

New Intermodal Facility

The city is considering the development of a publicly-owned intermodal solid waste transfer facility. Under this scenario, the majority of contracted collection trucks could be routed directly to this facility.

What would this do?

Reduce transportation costs by:

- Reducing the number of short-haul trips between the recycling & disposal stations and the railhead;
- Reducing number of shipping containers transported to landfill, by maximizing container capacity in the absence of road weight restrictions; and
- Locating a station with access to both rail lines.

Other intermodal benefits include:

- Providing long-term capacity to transfer waste out of town;
- Reducing volume of waste received at the recycling & disposal stations; and
- Providing access to other landfills.

Modify Existing City Recycling & Disposal Stations

The City is also looking at ways to improve the existing recycling & disposal stations. These modifications could require major remodeling or demolition and replacement of the existing structures. Modifications could be designed to mitigate adverse impacts on the surrounding neighborhood (noise, odor, dust, etc) and improve facility operations.

What kind of improvements and modifications?

- Reconfigure layout to accommodate self-haul customers more efficiently to reduce wait times;
- Expand areas for recycling and sorting waste to improve the recycling rate;
- Make facility more user-friendly;
- Minimize delays and traffic hazards by designating a separate area of facility for large truck traffic; and
- Reduce odors by providing an enclosed receiving area for odorous waste (yard waste, food waste, etc.) with air control and exhaust filtering.